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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/521,125	01/12/2005	Lu Tian	139369USPCT	6511

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EXAMINER	
AJIBADE AKONAI, OLUMIDE	
ART UNIT	PAPER NUMBER
2617	

MAIL DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/521,125	TIAN ET AL.	
	Examiner	Art Unit	
	Olumide T. Ajibade-Akonai	2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *25 May 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *16-20 and 25-27* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *16-20 and 25-27* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments, see pages 4-5, filed 05 May 2006, with respect to the rejection(s) of claim(s) 16-20 and 25-27 under 35 U.S.C § 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Jain et al 6,987,751 and Uchida et al 7,072,359.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 16-20 and 25-27 rejected under 35 U.S.C. 103(a) as being unpatentable over **Jain et al 6,987,751** (**hereinafter Jain**) in view of **Uchida et al 7,072,359** (**hereinafter Uchida**).

Regarding **claim 16**, Jain discloses a method for transferring GSM-based information between a GSM communications system and a GSM/CDMA compatible mobile device (dual mode MS 18, see fig. 1, col. 3, lines 45-48) via a CDMA interface, the method comprising: establishing a CDMA channel between the mobile device and a switch (MS 18 sending a message to CDMA 24 via CDMA RAN 12, indicating a channel is/has been established between the MS 18 and hybrid MSC 24, see fig. 1, col. 4, lines 16-22 and 35-41), wherein the switch is accessible to the GSM network (see fig. 1, col.

4, lines 16-22) and adapted to send and receive both GSM and CDMA messages (hybrid MSC 24, see fig. 1, col. 4, lines 16-22 and 35-41), and wherein the switch establishes the channel using a base station system application part (inherent, since the hybrid MSC 24 communicates with the GSM core network using GSM principles, therefore indicating that it uses the base station system application part as the protocol to communicate across the A interface of the GSM network with the GSM base station subsystem, see col. 4, lines 16-22) and radio resource manager inherited from the CDMA interface (inherent, the hybrid MSC 24 communicates with the CDMA RAN 12, indicating that MSC 24 uses radio resource management from the CDMA RAN for assignment, management, reconfiguration and release of radio resources/channels, see fig. 1, col. 3, lines 40-51, col. 4, lines 16-18 and 35-41, 52-55); receiving, via a mobility management agent inherited by the switch from the GSM system, GSM-based information from the GSM network (see fig. 1, col. 3, lines 40-51, col. 4, lines 16-18 and 35-41, 52-55).

Jain does not disclose inserting the information received from a GSM network into a CDMA message; and transferring the CDMA message to the mobile device via the CDMA interface, wherein the CDMA message is an "ADDS Deliver" message.

In an analogous art, Uchida discloses a communication network 100 that includes a CDMA network 110 and a GSM network 120 (see fig. 1, col. 3, lines 31-34), the network executing the method of inserting the information received from a GSM

network (GSM SMS message, see fig. 3, col. 7, lines 42-45) into a CDMA message (conversion of GSM SMS to a CDMA message, see fig. 3, col. 7, lines 42-59); and transferring the CDMA message to the mobile device via the CDMA interface (see fig. 4, col. 8, lines 45-51), wherein the CDMA message is an "ADDS Deliver" message (the converted message is an "ADDS DELIVER" message because of the variable length of the user data of the CDMA SMS message, see fig. 2, table 3, col. 5, lines 47-65, col. 7, lines 42-59).

It would therefore have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Uchida, by encapsulating GSM information in a CDMA message, for the benefit of transmitting GSM SMS messages to mobile users in a CDMA network.

Regarding **claim 17**, as applied to claim 16, Jain further discloses wherein establishing CDMA channel occurs prior to authenticating the mobile device in the GSM network (see col. 4, lines 52-56).

Regarding **claim 18**, as applied to claim 16, Jain, as modified by Uchida disclose the claimed invention.

Jain fails to disclose receiving CDMA information from the mobile device; and converting the CDMA information into GSM information for compatibility with the GSM network.

Uchida, however, further discloses receiving CDMA information from the mobile device (see col. 7, lines 60-67); and converting the CDMA information into GSM

information for compatibility with the GSM network (col. 7, lines 60-67, and col. 8, lines 1-9).

It would therefore have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Jain and Uchida, by encapsulating CDMA information in a GSM message, for the benefit of transmitting CDMA SMS messages to mobile users in a GSM network.

Regarding **claim 19**, as applied to claim 16, Jain, as modified by Uchida disclose the claimed invention.

Jain fails to disclose wherein the CDMA message is an "ADDS Deliver" message, and wherein inserting the GSM information into the CDMA message includes identifying a predetermined field in the "ADDS Deliver," wherein the predetermined field is used to store the GSM information (the converted message is an "ADDS DELIVER" message because of the variable length of the user data of the CDMA SMS message, see fig. 2, table 3, col. 5, lines 47-65, col. 7, lines 42-59).

Uchida, however, further discloses wherein the CDMA message is an "ADDS Deliver" message, and wherein inserting the GSM information into the CDMA message includes identifying a predetermined field in the "ADDS Deliver," wherein the predetermined field is used to store the GSM information (the converted message is an "ADDS DELIVER" message because of the variable length of the user data of the CDMA SMS message, see fig. 2, table 3, col. 5, lines 47-65, col. 7, lines 42-59).

It would therefore have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Uchida, by encapsulating

GSM information in a CDMA message, for the benefit of transmitting GSM SMS messages to mobile users in a CDMA network.

Regarding **claim 20**, as applied to claim 16, Jain, as modified by Uchida disclose the claimed invention.

Jain fails to disclose extracting the GSM information from the CDMA message; and processing the extracted GSM information.

Uchida, however, further discloses extracting the GSM information from the CDMA message; and processing the extracted GSM information (see fig. 5, col. 9, lines 31-60).

It would therefore have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Uchida, by encapsulating GSM information in a CDMA message, for the benefit of transmitting GSM SMS messages to mobile users in a CDMA network.

Regarding **claim 25**, Jain discloses a system for enabling communication between a mobile device via a CDMA interface and a network which uses another telecommunication technology that is generally incompatible with the CDMA telecommunication technology, the system comprising: a switch in communication with the network and adapted to send and receive both CDMA messages and another telecommunication technology messages (hybrid MSC 24, see fig. 1, col. 4, lines 16-22 and 35-41); and a base station system adapted for establishing communication with the mobile device over a CDMA radio interface (CDMA RAN 12, see fig. 1, col. 3, 40-40-48).

Jain fails to disclose wherein the switch receives information from the another telecommunication technology network and inserts the information into a CDMA "ADDS Deliver" message; and wherein the a CDMA "ADDS Deliver" message is provided to the mobile device by the base station system via the CDMA radio interface.

In the same field of endeavor, Uchida discloses wherein the switch receives information from the another telecommunication technology network (GSM SMS message, see fig. 3, col. 7, lines 42-45) and inserts the information into a CDMA "ADDS Deliver" message (the converted message is an "ADDS DELIVER" message because of the variable length of the user data of the CDMA SMS message, see fig. 2, table 3, col. 5, lines 47-65, col. 7, lines 42-59); and wherein the a CDMA "ADDS Deliver" message is provided to the mobile device by the base station system via the CDMA radio interface (see col. 9, 20-35).

It would therefore have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Uchida, by encapsulating GSM information in a CDMA message, for the benefit of transmitting GSM SMS messages to mobile users in a CDMA network.

Regarding **claim 26**, as applied to claim 25, Jain, as modified by Uchida discloses the claimed invention.

Jain fails to disclose wherein the switch inserts the information into a predetermined field in the CDMA "ADDS DELIVER".

Uchida, however, further discloses disclose wherein the switch inserts the information into a predetermined field in the CDMA "ADDS DELIVER" message (see fig. 3, col. 7, lines 42-59).

It would therefore have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Uchida, by encapsulating GSM information in a CDMA message, for the benefit of transmitting GSM SMS messages to mobile users in a CDMA network.

Regarding **claim 27**, as applied to claim 25, Jain, as modified by Uchida discloses the claimed invention.

Jain fails to disclose wherein the switch is further adapted for receiving CDMA "ADDS Delivery" messages from the base station system and extracting any information which may be compatible with the another telecommunication technology.

Uchida, however, further discloses wherein the switch is further adapted for receiving CDMA "ADDS Delivery" messages from the base station system and extracting any information which may be compatible with the another telecommunication technology (see fig. 5, col. 9, lines 31-60).

It would therefore have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Uchida, by encapsulating GSM information in a CDMA message, for the benefit of transmitting GSM SMS messages to mobile users in a CDMA network.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Grilli et al (6,438,117) discloses a base station synchronization for handover in a hybrid GSM/CDMA network.

Nevo et al (6,813,256) discloses signaling data link for a GSM/CDMA air interface.

Keskitalo et al (5,920,553) discloses a data transmission method, base station equipment, and mobile station.

Durchmann et al (5,664,004) discloses support of multiplicity of radio interfaces over an interface between a base station system and a mobile switch.

Tsao discloses an efficient tunneling protocol for General Packet Radio Service.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Olumide T. Ajibade-Akonai whose telephone number is 571-272-6496. The examiner can normally be reached on M-F, 8.30p-5p.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rafael Perez-Gutierrez can be reached on 571-272-7915. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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